



SEQUENCE LISTING

<110> Pramod K. Srivastava

<120> ALPHA(2) MACROGLOBULIN RECEPTOR AS A HEAT SHOCK
PROTEIN RECEPTOR AND USES THEREOF

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<150> 09/750,972

<151> 2000-12-28

<150> 09/668,724

<151> 2000-09-22

<160> 57

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 14849

<212> DNA

<213> Mus musculus

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<210> 2

<211> 4545

<212> PRT

<213> Mus musculus

<400> 2

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Val	Ser	Gly	Ala	Thr	Met	Asp	Ala	Pro	Lys	Thr	Cys	Ser	Pro	Lys	Gln
			20					25					30		

Phe	Ala	Cys	Arg	Asp	Gln	Ile	Thr	Cys	Ile	Ser	Lys	Gly	Trp	Arg	Cys
		35					40					45			
Asp	Gly	Glu	Arg	Asp	Cys	Pro	Asp	Gly	Ser	Asp	Glu	Ala	Pro	Glu	Ile
	50					55					60				
Cys	Pro	Gln	Ser	Lys	Ala	Gln	Arg	Cys	Pro	Pro	Asn	Glu	His	Ser	Cys
65					70					75					80
Leu	Gly	Thr	Glu	Leu	Cys	Val	Pro	Met	Ser	Arg	Leu	Cys	Asn	Gly	Ile
				85					90					95	
Gln	Asp	Cys	Met	Asp	Gly	Ser	Asp	Glu	Gly	Ala	His	Cys	Arg	Glu	Leu
			100					105						110	
Arg	Ala	Asn	Cys	Ser	Arg	Met	Gly	Cys	Gln	His	His	Cys	Val	Pro	Thr
		115					120					125			
Pro	Ser	Gly	Pro	Thr	Cys	Tyr	Cys	Asn	Ser	Ser	Phe	Gln	Leu	Glu	Ala
	130					135					140				
Asp	Gly	Lys	Thr	Cys	Lys	Asp	Phe	Asp	Glu	Cys	Ser	Val	Tyr	Gly	Thr
145					150					155					160
Cys	Ser	Gln	Leu	Cys	Thr	Asn	Thr	Asp	Gly	Ser	Phe	Thr	Cys	Gly	Cys
				165					170					175	
Val	Glu	Gly	Tyr	Leu	Leu	Gln	Pro	Asp	Asn	Arg	Ser	Cys	Lys	Ala	Lys
			180					185					190		
Asn	Glu	Pro	Val	Asp	Arg	Pro	Pro	Val	Leu	Leu	Ile	Ala	Asn	Ser	Gln
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Asn	Ile	Leu	Ala	Thr	Tyr	Leu	Ser	Gly	Ala	Gln	Val	Ser	Thr	Ile	Thr
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Pro	Thr	Ser	Thr	Arg	Gln	Thr	Thr	Ala	Met	Asp	Phe	Ser	Tyr	Ala	Asn
225					230					235					240
Glu	Thr	Val	Cys	Trp	Val	His	Val	Gly	Asp	Ser	Ala	Ala	Gln	Thr	Gln
				245					250					255	
Leu	Lys	Cys	Ala	Arg	Met	Pro	Gly	Leu	Lys	Gly	Phe	Val	Asp	Glu	His
			260					265					270		
Thr	Ile	Asn	Ile	Ser	Leu	Ser	Leu	His	His	Val	Glu	Gln	Met	Ala	Ile
		275						280				285			
Asp	Trp	Leu	Thr	Gly	Asn	Phe	Tyr	Phe	Val	Asp	Asp	Ile	Asp	Asp	Arg
	290					295					300				
Ile	Phe	Val	Cys	Asn	Arg	Asn	Gly	Asp	Thr	Cys	Val	Thr	Leu	Leu	Asp
305					310					315					320
Leu	Glu	Leu	Tyr	Asn	Pro	Lys	Gly	Ile	Ala	Leu	Asp	Pro	Ala	Met	Gly
				325					330					335	
Lys	Val	Phe	Phe	Thr	Asp	Tyr	Gly	Gln	Ile	Pro	Lys	Val	Glu	Arg	Cys
			340					345					350		
Asp	Met	Asp	Gly	Gln	Asn	Arg	Thr	Lys	Leu	Val	Asp	Ser	Lys	Ile	Val
		355					360					365			
Phe	Pro	His	Gly	Ile	Thr	Leu	Asp	Leu	Val	Ser	Arg	Leu	Val	Tyr	Trp
	370					375					380				
Ala	Asp	Ala	Tyr	Leu											

Ala	Asn	Ser	His	Lys	Ala	Arg	Thr	Cys	Arg	Cys	Arg	Ser	Gly	Phe	Ser	500	505	510
Leu	Gly	Ser	Asp	Gly	Lys	Ser	Cys	Lys	Lys	Pro	Glu	His	Glu	Leu	Phe	515	520	525
Leu	Val	Tyr	Gly	Lys	Gly	Arg	Pro	Gly	Ile	Ile	Arg	Gly	Met	Asp	Met	530	535	540
Gly	Ala	Lys	Val	Pro	Asp	Glu	His	Met	Ile	Pro	Ile	Glu	Asn	Leu	Met	545	550	555
Asn	Pro	Arg	Ala	Leu	Asp	Phe	His	Ala	Glu	Thr	Gly	Phe	Ile	Tyr	Phe	565	570	575
Ala	Asp	Thr	Thr	Ser	Tyr	Leu	Ile	Gly	Arg	Gln	Lys	Ile	Asp	Gly	Thr	580	585	590
Glu	Arg	Glu	Thr	Ile	Leu	Lys	Asp	Gly	Ile	His	Asn	Val	Glu	Gly	Val	595	600	605
Ala	Val	Asp	Trp	Met	Gly	Asp	Asn	Leu	Tyr	Trp	Thr	Asp	Asp	Gly	Pro	610	615	620
Lys	Lys	Thr	Ile	Ser	Val	Ala	Arg	Leu	Glu	Lys	Ala	Ala	Gln	Thr	Arg	625	630	635
Lys	Thr	Leu	Ile	Glu	Gly	Lys	Met	Thr	His	Pro	Arg	Ala	Ile	Val	Val	645	650	655
Asp	Pro	Leu	Asn	Gly	Trp	Met	Tyr	Trp	Thr	Asp	Trp	Glu	Glu	Asp	Pro	660	665	670
Lys	Asp	Ser	Arg	Arg	Gly	Arg	Leu	Glu	Arg	Ala	Trp	Met	Asp	Gly	Ser	675	680	685
His	Arg	Asp	Ile	Phe	Val	Thr	Ser	Lys	Thr	Val	Leu	Trp	Pro	Asn	Gly	690	695	700
Leu	Ser	Leu	Asp	Ile	Pro	Ala	Gly	Arg	Leu	Tyr	Trp	Val	Asp	Ala	Phe	705	710	715
Tyr	Asp	Arg	Ile	Glu	Thr	Ile	Leu	Leu	Asn	Gly	Thr	Asp	Arg	Lys	Ile	725	730	735
Val	Tyr	Glu	Gly	Pro	Glu	Leu	Asn	His	Ala	Phe	Gly	Leu	Cys	His	His	740	745	750
Gly	Asn	Tyr	Leu	Phe	Trp	Thr	Glu	Tyr	Arg	Ser	Gly	Ser	Val	Tyr	Arg	755	760	765
Leu	Glu	Arg	Gly	Val	Ala	Gly	Ala	Pro	Pro	Thr	Val	Thr	Leu	Leu	Arg	770	775	780
Ser	Glu	Arg	Pro	Pro	Ile	Phe	Glu	Ile	Arg	Met	Tyr	Asp	Ala	His	Glu	785	790	795
Gln	Gln	Val	Gly	Thr	Asn	Lys	Cys	Arg	Val	Asn	Asn	Gly	Gly	Cys	Ser	805	810	815
Ser	Leu	Cys	Leu	Ala	Thr	Pro	Gly	Ser	Arg	Gln	Cys	Ala	Cys	Ala	Glu	820	825	830
Asp	Gln	Val	Leu	Asp	Thr	Asp	Gly	Val	Thr	Cys	Leu	Ala	Asn	Pro	Ser	835	840	845
Tyr	Val	Pro	Pro	Pro	Gln	Cys	Gln	Pro	Gly	Gln	Phe	Ala	Cys	Ala	Asn	850	855	860
Asn	Arg	Cys	Ile	Gln	Glu	Arg	Trp	Lys	Cys	Asp	Gly	Asp	Asn	Asp	Cys	865	870	875
Leu	Asp	Asn	Ser	Asp	Glu	Ala	Pro	Ala	Leu	Cys	His	Gln	His	Thr	Cys	885	890	895
Pro	Ser	Asp	Arg	Phe	Lys	Cys	Glu	Asn	Asn	Arg	Cys	Ile	Pro	Asn	Arg	900	905	910
Trp	Leu	Cys	Asp	Gly	Asp	Asn	Asp	Cys	Gly	Asn	Ser	Glu	Asp	Glu	Ser	915	920	925
Asn	Ala	Thr	Cys	Ser	Ala	Arg	Thr	Cys	Pro	Pro	Asn	Gln	Phe	Ser	Cys	930	935	940
Ala	Ser	Gly	Arg	Cys	Ile	Pro	Ile	Ser	Trp	Thr	Cys	Asp	Leu	Asp	Asp	945	950	955
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Arg Thr Ile His Arg	Glu Thr Gly Ser Gly Gly Cys Ala Asn Gly Leu	1425	1430	1435	1440
Thr Val Asp Tyr Leu	Glu Lys Arg Ile Leu Trp Ile Asp Ala Arg Ser	1445	1450	1455	
Asp Ala Ile Tyr Ser	Ala Arg Tyr Asp Gly Ser Gly His Met Glu Val	1460	1465	1470	
Leu Arg Gly His Glu	Phe Leu Ser His Pro Phe Ala Val Thr Leu Tyr	1475	1480	1485	
Gly Gly Glu Val Tyr	Trp Thr Asp Trp Arg Thr Asn Thr Leu Ala Lys	1490	1495	1500	
Ala Asn Lys Trp Thr	Gly His Asn Val Thr Val Val Gln Arg Thr Asn	1505	1510	1515	1520
Thr Gln Pro Phe Asp	Leu Gln Val Tyr His Pro Ser Arg Gln Pro Met	1525	1530	1535	
Ala Pro Asn Pro Cys	Glu Ala Asn Gly Gly Arg Gly Pro Cys Ser His	1540	1545	1550	
Leu Cys Leu Ile Asn	Tyr Asn Arg Thr Val Ser Trp Ala Cys Pro His	1555	1560	1565	
Leu Met Lys Leu His	Lys Asp Asn Thr Thr Cys Tyr Glu Phe Lys Lys	1570	1575	1580	
Phe Leu Leu Tyr Ala	Arg Gln Met Glu Ile Arg Gly Val Asp Leu Asp	1585	1590	1595	1600
Ala Pro Tyr Tyr Asn	Tyr Ile Ile Ser Phe Thr Val Pro Asp Ile Asp	1605	1610	1615	
Asn Val Thr Val Leu	Asp Tyr Asp Ala Arg Glu Gln Arg Val Tyr Trp	1620	1625	1630	
Ser Asp Val Arg Thr	Gln Ala Ile Lys Arg Ala Phe Ile Asn Gly Thr	1635	1640	1645	
Gly Val Glu Thr Val	Val Ser Ala Asp Leu Pro Asn Ala His Gly Leu	1650	1655	1660	
Ala Val Asp Trp Val	Ser Arg Asn Leu Phe Trp Thr Ser Tyr Asp Thr	1665	1670	1675	1680
Asn Lys Lys Gln Ile	Asn Val Ala Arg Leu Asp Gly Ser Phe Lys Asn	1685	1690	1695	
Ala Val Val Gln Gly	Leu Glu Gln Pro His Gly Leu Val Val His Pro	1700	1705	1710	
Leu Arg Gly Lys Leu	Tyr Trp Thr Asp Gly Asp Asn Ile Ser Met Ala	1715	1720	1725	
Asn Met Asp Gly Ser	Asn His Thr Leu Leu Phe Ser Gly Gln Lys Gly	1730	1735	1740	
Pro Val Gly Leu Ala	Ile Asp Phe Pro Glu Ser Lys Leu Tyr Trp Ile	1745	1750	1755	1760
Ser Ser Gly Asn His	Thr Ile Asn Arg Cys Asn Leu Asp Gly Ser Glu	1765	1770	1775	
Leu Glu Val Ile Asp	Thr Met Arg Ser Gln Leu Gly Lys Ala Thr Ala	1780	1785	1790	
Leu Ala Ile Met Gly	Asp Lys Leu Trp Trp Ala Asp Gln Val Ser Glu	1795	1800	1805	
Lys Met Gly Thr Cys	Asn Lys Ala Asp Gly Ser Gly Ser Val Val Leu	1810	1815	1820	
Arg Asn Ser Thr Thr	Leu Val Met His Met Lys Val Tyr Asp Glu Ser	1825	1830	1835	1840
Ile Gln Leu Glu His	Glu Gly Thr Asn Pro Cys Ser Val Asn Asn Gly	1845	1850	1855	
Asp Cys Ser Gln Leu	Cys Leu Pro Thr Ser Glu Thr Thr Arg Ser Cys	1860	1865	1870	
Met Cys Thr Ala Gly	Tyr Ser Leu Arg Ser Gly Gln Gln Ala Cys Glu	1875	1880	1885	

Gly Val Gly Ser Phe Leu Leu Tyr Ser Val His Glu Gly Ile Arg Gly	1890	1895	1900
Ile Pro Leu Asp Pro Asn Asp Lys Ser Asp Ala Leu Val Pro Val Ser	1905	1910	1915
Gly Thr Ser Leu Ala Val Gly Ile Asp Phe His Ala Glu Asn Asp Thr	1925	1930	1935
Ile Tyr Trp Val Asp Met Gly Leu Ser Thr Ile Ser Arg Ala Lys Arg	1940	1945	1950
Asp Gln Thr Trp Arg Glu Asp Val Val Thr Asn Gly Ile Gly Arg Val	1955	1960	1965
Glu Gly Ile Ala Val Asp Trp Ile Ala Gly Asn Ile Tyr Trp Thr Asp	1970	1975	1980
Gln Gly Phe Asp Val Ile Glu Val Ala Arg Leu Asn Gly Ser Phe Arg	1985	1990	1995
Tyr Val Val Ile Ser Gln Gly Leu Asp Lys Pro Arg Ala Ile Thr Val	2005	2010	2015
His Pro Glu Lys Gly Tyr Leu Phe Trp Thr Glu Trp Gly His Tyr Pro	2020	2025	2030
Arg Ile Glu Arg Ser Arg Leu Asp Gly Thr Glu Arg Val Val Leu Val	2035	2040	2045
Asn Val Ser Ile Ser Trp Pro Asn Gly Ile Ser Val Asp Tyr Gln Gly	2050	2055	2060
Gly Lys Leu Tyr Trp Cys Asp Ala Arg Met Asp Lys Ile Glu Arg Ile	2065	2070	2075
Asp Leu Glu Thr Gly Glu Asn Arg Glu Val Val Leu Ser Ser Asn Asn	2085	2090	2095
Met Asp Met Phe Ser Val Ser Val Phe Glu Asp Phe Ile Tyr Trp Ser	2100	2105	2110
Asp Arg Thr His Ala Asn Gly Ser Ile Lys Arg Gly Cys Lys Asp Asn	2115	2120	2125
Ala Thr Asp Ser Val Pro Leu Arg Thr Gly Ile Gly Val Gln Leu Lys	2130	2135	2140
Asp Ile Lys Val Phe Asn Arg Asp Arg Gln Lys Gly Thr Asn Val Cys	2145	2150	2155
Ala Val Ala Asn Gly Gly Cys Gln Gln Leu Cys Leu Tyr Arg Gly Gly	2165	2170	2175
Gly Gln Arg Ala Cys Ala Cys Ala His Gly Met Leu Ala Glu Asp Gly	2180	2185	2190
Ala Ser Cys Arg Glu Tyr Ala Gly Tyr Leu Leu Tyr Ser Glu Arg Thr	2195	2200	2205
Ile Leu Lys Ser Ile His Leu Ser Asp Glu Arg Asn Leu Asn Ala Pro	2210	2215	2220
Val Gln Pro Phe Glu Asp Pro Glu His Met Lys Asn Val Ile Ala Leu	2225	2230	2235
Ala Phe Asp Tyr Arg Ala Gly Thr Ser Pro Gly Thr Pro Asn Arg Ile	2245	2250	2255
Phe Phe Ser Asp Ile His Phe Gly Asn Ile Gln Gln Ile Asn Asp Asp	2260	2265	2270
Gly Ser Gly Arg Thr Thr Ile Val Glu Asn Val Gly Ser Val Glu Gly	2275	2280	2285
Leu Ala Tyr His Arg Gly Trp Asp Thr Leu Tyr Trp Thr Ser Tyr Thr	2290	2295	2300
Thr Ser Thr Ile Thr Arg His Thr Val Asp Gln Thr Arg Pro Gly Ala	2305	2310	2315
Phe Glu Arg Glu Thr Val Ile Thr Met Ser Gly Asp Asp His Pro Arg	2325	2330	2335
Ala Phe Val Leu Asp Glu Cys Gln Asn Leu Met Phe Trp Thr Asn Trp	2340	2345	2350

Asn	Glu	Leu	His	Pro	Ser	Ile	Met	Arg	Ala	Ala	Leu	Ser	Gly	Ala	Asn	2355	2360	2365
Val	Leu	Thr	Leu	Ile	Glu	Lys	Asp	Ile	Arg	Thr	Pro	Asn	Gly	Leu	Ala	2370	2375	2380
Ile	Asp	His	Arg	Ala	Glu	Lys	Leu	Tyr	Phe	Ser	Asp	Ala	Thr	Leu	Asp	2385	2390	2395
Lys	Ile	Glu	Arg	Cys	Glu	Tyr	Asp	Gly	Ser	His	Arg	Tyr	Val	Ile	Leu	2405	2410	2415
Lys	Ser	Glu	Pro	Val	His	Pro	Phe	Gly	Leu	Ala	Val	Tyr	Gly	Glu	His	2420	2425	2430
Ile	Phe	Trp	Thr	Asp	Trp	Val	Arg	Arg	Ala	Val	Gln	Arg	Ala	Asn	Lys	2435	2440	2445
Tyr	Val	Gly	Ser	Asp	Met	Lys	Leu	Leu	Arg	Val	Asp	Ile	Pro	Gln	Gln	2450	2455	2460
Pro	Met	Gly	Ile	Ile	Ala	Val	Ala	Asn	Asp	Thr	Asn	Ser	Cys	Glu	Leu	2465	2470	2475
Ser	Pro	Cys	Arg	Ile	Asn	Asn	Gly	Gly	Cys	Gln	Asp	Leu	Cys	Leu	Leu	2485	2490	2495
Thr	His	Gln	Gly	His	Val	Asn	Cys	Ser	Cys	Arg	Gly	Gly	Arg	Ile	Leu	2500	2505	2510
Gln	Glu	Asp	Phe	Thr	Cys	Arg	Ala	Val	Asn	Ser	Ser	Cys	Arg	Ala	Gln	2515	2520	2525
Asp	Glu	Phe	Glu	Cys	Ala	Asn	Gly	Glu	Cys	Ile	Ser	Phe	Ser	Leu	Thr	2530	2535	2540
Cys	Asp	Gly	Val	Ser	His	Cys	Lys	Asp	Lys	Ser	Asp	Glu	Lys	Pro	Ser	2545	2550	2555
Tyr	Cys	Asn	Ser	Arg	Arg	Cys	Lys	Lys	Thr	Phe	Arg	Gln	Cys	Asn	Asn	2565	2570	2575
Gly	Arg	Cys	Val	Ser	Asn	Met	Leu	Trp	Cys	Asn	Gly	Val	Asp	Tyr	Cys	2580	2585	2590
Gly	Asp	Gly	Ser	Asp	Glu	Ile	Pro	Cys	Asn	Lys	Thr	Ala	Cys	Gly	Val	2595	2600	2605
Gly	Glu	Phe	Arg	Cys	Arg	Asp	Gly	Ser	Cys	Ile	Gly	Asn	Ser	Ser	Arg	2610	2615	2620
Cys	Asn	Gln	Phe	Val	Asp	Cys	Glu	Asp	Ala	Ser	Asp	Glu	Met	Asn	Cys	2625	2630	2635
Ser	Ala	Thr	Asp	Cys	Ser	Ser	Tyr	Phe	Arg	Leu	Gly	Val	Lys	Gly	Val	2645	2650	2655
Leu	Phe	Gln	Pro	Cys	Glu	Arg	Thr	Ser	Leu	Cys	Tyr	Ala	Pro	Ser	Trp	2660	2665	2670
Val	Cys	Asp	Gly	Ala	Asn	Asp	Cys	Gly	Asp	Tyr	Ser	Asp	Glu	Arg	Asp	2675	2680	2685
Cys	Pro	Gly	Val	Lys	Arg	Pro	Arg	Cys	Pro	Leu	Asn	Tyr	Phe	Ala	Cys	2690	2695	2700
Pro	Ser	Gly	Arg	Cys	Ile	Pro	Met	Ser	Trp	Thr	Cys	Asp	Lys	Glu	Asp	2705	2710	2715
Asp	Cys	Glu	Asn	Gly	Glu	Asp	Glu	Thr	His	Cys	Asn	Lys	Phe	Cys	Ser	2725	2730	2735
Glu	Ala	Gln	Phe	Glu	Cys	Gln	Asn	His	Arg	Cys	Ile	Ser	Lys	Gln	Trp	2740	2745	2750
Leu	Cys	Asp	Gly	Ser	Asp	Asp	Cys	Gly	Asp	Gly	Ser	Asp	Glu	Ala	Ala	2755	2760	2765
His	Cys	Glu	Gly	Lys	Thr	Cys	Gly	Pro	Ser	Ser	Phe	Ser	Cys	Pro	Gly	2770	2775	2780
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<400> 11
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1				5				10					15		
Val	Thr	Gly	Glu	Gly	Cys	Val	Tyr	Leu	Gln	Thr	Ser	Leu	Lys	Tyr	Asn
			20					25					30		
Ile	Leu	Pro	Glu	Lys	Glu	Glu	Phe	Pro	Phe	Ala	Leu	Gly	Val	Gln	Thr
		35					40					45			
Leu	Pro	Gln	Thr	Cys	Asp	Glu	Pro	Lys	Ala	His	Thr	Ser	Phe	Gln	Ile
	50					55					60				
Ser	Leu	Ser	Val	Ser	Tyr	Thr	Gly	Ser	Arg	Ser	Ala	Ser	Asn	Met	Ala
65					70					75					80
Ile	Val	Asp	Val	Lys	Met	Val	Ser	Gly	Phe	Ile	Pro	Leu	Lys	Pro	Thr
				85					90					95	
Val	Lys	Met	Leu	Glu	Arg	Ser	Asn	His	Val	Ser	Arg	Thr	Glu	Val	Ser
			100					105					110		
Ser	Asn	His	Val	Leu	Ile	Tyr	Leu	Asp	Lys	Val	Ser	Asn	Gln		
		115					120					125			

<210> 12
 <211> 111
 <212> PRT
 <213> Homo sapiens

Leu	Gln	Gln	Val	Ser	Leu	Pro	Glu	Leu	Pro	Gly	Glu	Tyr	Ser	Met	Lys
1				5					10					15	
Val	Thr	Gly	Glu	Gly	Cys	Val	Tyr	Leu	Gln	Thr	Ser	Leu	Lys	Tyr	Asn
			20					25					30		
Ile	Leu	Pro	Glu	Lys	Glu	Glu	Phe	Pro	Phe	Ala	Leu	Gly	Val	Gln	Thr
		35					40					45			
Leu	Pro	Gln	Thr	Cys	Asp	Glu	Pro	Lys	Ala	His	Thr	Ser	Phe	Gln	Ile
	50					55					60				
Ser	Leu	Ser	Val	Ser	Tyr	Thr	Gly	Ser	Arg	Ser	Ala	Ser	Asn	Met	Ala
65					70					75					80
Ile	Val	Asp	Val	Lys	Met	Val	Ser	Gly	Phe	Ile	Pro	Leu	Lys	Pro	Thr
				85					90					95	
Val	Lys	Met	Leu	Glu	Arg	Ser	Asn	His	Val	Ser	Arg	Thr	Glu	Val	
			100					105					110		

<210> 13
 <211> 81
 <212> PRT
 <213> Homo sapiens

Leu	Gln	Gln	Val	Ser	Leu	Pro	Glu	Leu	Pro	Gly	Glu	Tyr	Ser	Met	Lys
1				5					10					15	
Val	Thr	Gly	Glu	Gly	Cys	Val	Tyr	Leu	Gln	Thr	Ser	Leu	Lys	Tyr	Asn
			20					25					30		
Ile	Leu	Pro	Glu	Lys	Glu	Glu	Phe	Pro	Phe	Ala	Leu	Gly	Val	Gln	Thr
		35					40					45			
Leu	Pro	Gln	Thr	Cys	Asp	Glu	Pro	Lys	Ala	His	Thr	Ser	Phe	Gln	Ile
	50					55					60				
Ser	Leu	Ser	Val	Ser	Tyr	Thr	Gly	Ser	Arg	Ser	Ala	Ser	Asn	Met	Ala
65					70					75					80
Ile															

<210> 14
 <211> 101

<212> PRT
 <213> Homo sapiens

<400> 14
 Gln Thr Ser Leu Lys Tyr Asn Ile Leu Pro Glu Lys Glu Glu Phe Pro
 1 5 10 15
 Phe Ala Leu Gly Val Gln Thr Leu Pro Gln Thr Cys Asp Glu Pro Lys
 20 25 30
 Ala His Thr Ser Phe Gln Ile Ser Leu Ser Val Ser Tyr Thr Gly Ser
 35 40 45
 Arg Ser Ala Ser Asn Met Ala Ile Val Asp Val Lys Met Val Ser Gly
 50 55 60
 Phe Ile Pro Leu Lys Pro Thr Val Lys Met Leu Glu Arg Ser Asn His
 65 70 75 80
 Val Ser Arg Thr Glu Val Ser Ser Asn His Val Leu Ile Tyr Leu Asp
 85 90 95
 Lys Val Ser Asn Gln
 100

<210> 15
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 15
 Gln Thr Ser Leu Lys Tyr Asn Ile Leu Pro Glu Lys Glu Glu Phe Pro
 1 5 10 15
 Phe Ala Leu Gly Val Gln Thr Leu Pro Gln Thr Cys Asp Glu Pro Lys
 20 25 30
 Ala His Thr Ser Phe Gln Ile Ser Leu Ser Val Ser Tyr Thr Gly Ser
 35 40 45
 Arg Ser Ala Ser Asn Met Ala Ile Val Asp Val Lys Met Val Ser Gly
 50 55 60
 Phe Ile Pro Leu Lys Pro Thr Val Lys Met Leu Glu
 65 70 75

<210> 16
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 16
 Gln Thr Ser Leu Lys Tyr Asn Ile Leu Pro Glu Lys Glu Glu Phe Pro
 1 5 10 15
 Phe Ala Leu Gly Val Gln Thr Leu Pro Gln Thr Cys Asp Glu Pro Lys
 20 25 30
 Ala His Thr Ser Phe Gln Ile Ser Leu Ser Val Ser Tyr Thr Gly Ser
 35 40 45
 Arg Ser Ala Ser Asn Met Ala Ile
 50 55

<210> 17
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 17

Gln Thr Cys Asp Glu Pro Lys Ala His Thr Ser Phe Gln Ile Ser Leu
 1 5 10 15
 Ser Val Ser Tyr Thr Gly Ser Arg Ser Ala Ser Asn Met Ala Ile Val
 20 25 30
 Asp Val Lys Met Val Ser Gly Phe Ile Pro Leu Lys Pro Thr Val Lys
 35 40 45
 Met Leu Glu Arg Ser Asn His Val Ser Arg Thr Glu Val Ser Ser Asn
 50 55 60
 His Val Leu Ile Tyr Leu Asp Lys Val Ser Asn Gln
 65 70 75

<210> 18
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 18
 Gln Thr Cys Asp Glu Pro Lys Ala His Thr Ser Phe Gln Ile Ser Leu
 1 5 10 15
 Ser Val Ser Tyr Thr Gly Ser Arg Ser Ala Ser Asn Met Ala Ile Val
 20 25 30
 Asp Val Lys Met Val Ser Gly Phe Ile Pro Leu Lys Pro Thr Val Lys
 35 40 45
 Met Leu Glu Arg Ser Asn His Val Ser Arg Thr Glu Val Ser Ser Asn
 50 55 60
 His Val Leu Ile Tyr Leu Asp Lys Val Ser Asn Gln
 65 70 75

<210> 19
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 19
 Gln Thr Cys Asp Glu Pro Lys Ala His Thr Ser Phe Gln Ile Ser Leu
 1 5 10 15
 Ser Val Ser Tyr Thr Gly Ser Arg Ser Ala Ser Asn Met Ala Ile
 20 25 30

<210> 20
 <211> 44
 <212> PRT
 <213> Homo sapiens

<400> 20
 Lys Thr Cys Ser Pro Lys Gln Phe Ala Cys Arg Asp Gln Ile Thr Cys
 1 5 10 15
 Ile Ser Lys Gly Trp Arg Cys Asp Gly Glu Arg Asp Cys Pro Asp Gly
 20 25 30
 Ser Asp Glu Ala Pro Glu Ile Cys Pro Gln Ser Lys
 35 40

<210> 21
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 21

Lys Thr Cys Ser Pro Lys Gln Phe Ala Cys Arg Asp Gln Ile Thr Cys
 1 5 10 15
 Ile Ser Lys Gly Trp Arg Cys Asp Gly Glu Arg Asp Cys Pro Asp Gly
 20 25 30
 Ser Asp Glu Ala Pro Glu Ile Cys Pro Gln Ser Lys Ala Gln Arg Cys
 35 40 45
 Gln Pro Asn Glu His Asn Cys Leu Gly Thr Glu Leu Cys Val Pro Met
 50 55 60
 Ser Arg Leu Cys Asn Gly Val Gln Asp Cys Met Asp Gly Ser Asp Glu
 65 70 75 80
 Gly Pro His Cys Arg Glu
 85

<210> 22
 <211> 43
 <212> PRT
 <213> Homo sapiens

<400> 22
 Lys Ala Gln Arg Cys Gln Pro Asn Glu His Asn Cys Leu Gly Thr Glu
 1 5 10 15
 Leu Cys Val Pro Met Ser Arg Leu Cys Asn Gly Val Gln Asp Cys Met
 20 25 30
 Asp Gly Ser Asp Glu Gly Pro His Cys Arg Glu
 35 40

<210> 23
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 23
 Gln Cys Gln Pro Gly Glu Phe Ala Cys Ala Asn Ser Arg Cys Ile Gln
 1 5 10 15
 Glu Arg Trp Lys Cys Asp Gly Asp Asn Asp Cys Leu Asp Asn Ser Asp
 20 25 30
 Glu Ala Pro Ala Leu Cys His Gln His Thr
 35 40

<210> 24
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 24
 Gln Cys Gln Pro Gly Glu Phe Ala Cys Ala Asn Ser Arg Cys Ile Gln
 1 5 10 15
 Glu Arg Trp Lys Cys Asp Gly Asp Asn Asp Cys Leu Asp Asn Ser Asp
 20 25 30
 Glu Ala Pro Ala Leu Cys His Gln His Thr Cys Pro Ser Asp Arg Phe
 35 40 45
 Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn Arg Trp Leu Cys Asp Gly
 50 55 60
 Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu Ser Asn Ala Thr Cys Ser
 65 70 75 80
 Ala Arg

<210> 25
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 25
 Gln Cys Gln Pro Gly Glu Phe Ala Cys Ala Asn Ser Arg Cys Ile Gln
 1 5 10 15
 Glu Arg Trp Lys Cys Asp Gly Asp Asn Asp Cys Leu Asp Asn Ser Asp
 20 25 30
 Glu Ala Pro Ala Leu Cys His Gln His Thr Cys Pro Ser Asp Arg Phe
 35 40 45
 Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn Arg Trp Leu Cys Asp Gly
 50 55 60
 Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu Ser Asn Ala Thr Cys Ser
 65 70 75 80
 Ala Arg Thr Cys Pro Pro Asn Gln Phe Ser Cys Ala Ser Gly Arg Cys
 85 90 95
 Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp Asp Asp Cys Gly Asp Arg
 100 105 110
 Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro
 115 120

<210> 26
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 26
 Gln Cys Gln Pro Gly Glu Phe Ala Cys Ala Asn Ser Arg Cys Ile Gln
 1 5 10 15
 Glu Arg Trp Lys Cys Asp Gly Asp Asn Asp Cys Leu Asp Asn Ser Asp
 20 25 30
 Glu Ala Pro Ala Leu Cys His Gln His Thr Cys Pro Ser Asp Arg Phe
 35 40 45
 Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn Arg Trp Leu Cys Asp Gly
 50 55 60
 Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu Ser Asn Ala Thr Cys Ser
 65 70 75 80
 Ala Arg Thr Cys Pro Pro Asn Gln Phe Ser Cys Ala Ser Gly Arg Cys
 85 90 95
 Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp Asp Asp Cys Gly Asp Arg
 100 105 110
 Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro Thr Cys Phe Pro Leu Thr
 115 120 125
 Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile Asn Ile Asn Trp Arg Cys
 130 135 140
 Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser Asp Glu Ala Gly Cys Ser
 145 150 155 160
 His

<210> 27
 <211> 208
 <212> PRT
 <213> Homo sapiens

<400> 27

Gln	Cys	Gln	Pro	Gly	Glu	Phe	Ala	Cys	Ala	Asn	Ser	Arg	Cys	Ile	Gln
1				5					10					15	
Glu	Arg	Trp	Lys	Cys	Asp	Gly	Asp	Asn	Asp	Cys	Leu	Asp	Asn	Ser	Asp
			20					25					30		
Glu	Ala	Pro	Ala	Leu	Cys	His	Gln	His	Thr	Cys	Pro	Ser	Asp	Arg	Phe
		35					40					45			
Lys	Cys	Glu	Asn	Asn	Arg	Cys	Ile	Pro	Asn	Arg	Trp	Leu	Cys	Asp	Gly
	50					55					60				
Asp	Asn	Asp	Cys	Gly	Asn	Ser	Glu	Asp	Glu	Ser	Asn	Ala	Thr	Cys	Ser
65					70					75					80
Ala	Arg	Thr	Cys	Pro	Pro	Asn	Gln	Phe	Ser	Cys	Ala	Ser	Gly	Arg	Cys
				85					90					95	
Ile	Pro	Ile	Ser	Trp	Thr	Cys	Asp	Leu	Asp	Asp	Asp	Cys	Gly	Asp	Arg
			100					105					110		
Ser	Asp	Glu	Ser	Ala	Ser	Cys	Ala	Tyr	Pro	Thr	Cys	Phe	Pro	Leu	Thr
		115					120					125			
Gln	Phe	Thr	Cys	Asn	Asn	Gly	Arg	Cys	Ile	Asn	Ile	Asn	Trp	Arg	Cys
	130					135					140				
Asp	Asn	Asp	Asn	Asp	Cys	Gly	Asp	Asn	Ser	Asp	Glu	Ala	Gly	Cys	Ser
145					150					155					160
His	Ser	Cys	Ser	Ser	Thr	Gln	Phe	Lys	Cys	Asn	Ser	Gly	Arg	Cys	Ile
				165					170					175	
Pro	Glu	His	Trp	Thr	Cys	Asp	Gly	Asp	Asn	Asp	Cys	Gly	Asp	Tyr	Ser
			180					185					190		
Asp	Glu	Thr	His	Ala	Asn	Cys	Thr	Asn	Gln	Ala	Thr	Arg	Pro	Pro	Gly
		195					200					205			

<210> 28
 <211> 150
 <212> PRT
 <213> Homo sapiens

Gln	Cys	Gln	Pro	Gly	Glu	Phe	Ala	Cys	Ala	Asn	Ser	Arg	Cys	Ile	Gln
1				5					10					15	
Glu	Arg	Trp	Lys	Cys	Asp	Gly	Asp	Asn	Asp	Cys	Leu	Asp	Asn	Ser	Asp
			20					25					30		
Glu	Ala	Pro	Ala	Leu	Cys	His	Gln	His	Thr	Cys	Pro	Ser	Asp	Arg	Phe
		35					40					45			
Lys	Cys	Glu	Asn	Asn	Arg	Cys	Ile	Pro	Asn	Arg	Trp	Leu	Cys	Asp	Gly
	50					55					60				
Asp	Asn	Asp	Cys	Gly	Asn	Ser	Glu	Asp	Glu	Ser	Asn	Ala	Thr	Cys	Ser
65					70					75					80
Ala	Arg	Thr	Cys	Pro	Pro	Asn	Gln	Phe	Ser	Cys	Ala	Ser	Gly	Arg	Cys
				85					90					95	
Ile	Pro	Ile	Ser	Trp	Thr	Cys	Asp	Leu	Asp	Asp	Asp	Cys	Gly	Asp	Arg
			100					105					110		
Ser	Asp	Glu	Ser	Ala	Ser	Cys	Ala	Tyr	Pro	Thr	Cys	Phe	Pro	Leu	Thr
		115					120					125			
Gln	Phe	Thr	Cys	Asn	Asn	Gly	Arg	Cys	Ile	Asn	Ile	Asn	Trp	Arg	Cys
	130					135					140				
Asp	Asn	Asp	Asn	Asp	Cys										
145					150										

<210> 29
 <211> 231
 <212> PRT
 <213> Homo sapiens

<400> 29
 Gln Cys Gln Pro Gly Glu Phe Ala Cys Ala Asn Ser Arg Cys Ile Gln
 1 5 10 15
 Glu Arg Trp Lys Cys Asp Gly Asp Asn Asp Cys Leu Asp Asn Ser Asp
 20 25 30
 Glu Ala Pro Ala Leu Cys His Gln His Thr Cys Pro Ser Asp Arg Phe
 35 40 45
 Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn Arg Trp Leu Cys Asp Gly
 50 55 60
 Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu Ser Asn Ala Thr Cys Ser
 65 70 75 80
 Ala Arg Thr Cys Pro Asn Gln Phe Ser Cys Ala Ser Gly Arg Cys
 85 90 95
 Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp Asp Asp Cys Gly Asp Arg
 100 105 110
 Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro Thr Cys Phe Pro Leu Thr
 115 120 125
 Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile Asn Ile Asn Trp Arg Cys
 130 135 140
 Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser Asp Glu Ala Gly Cys Ser
 145 150 155 160
 His Ser Cys Ser Ser Thr Gln Phe Lys Cys Asn Ser Gly Arg Cys Ile
 165 170 175
 Pro Glu His Trp Thr Cys Asp Gly Asp Asn Asp Cys Gly Asp Tyr Ser
 180 185 190
 Asp Glu Thr His Ala Asn Cys Thr Asn Gln Ala Thr Arg Pro Pro Gly
 195 200 205
 Gly Cys His Thr Asp Glu Phe Gln Cys Arg Leu Asp Gly Leu Cys Ile
 210 215 220
 Pro Leu Arg Trp Arg Cys Asp
 225 230

<210> 30
 <211> 40
 <212> PRT
 <213> Homo sapiens

<400> 30
 Cys Pro Ser Asp Arg Phe Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn
 1 5 10 15
 Arg Trp Leu Cys Asp Gly Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu
 20 25 30
 Ser Asn Ala Thr Cys Ser Ala Arg
 35 40

<210> 31
 <211> 80
 <212> PRT
 <213> Homo sapiens

<400> 31
 Cys Pro Ser Asp Arg Phe Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn
 1 5 10 15
 Arg Trp Leu Cys Asp Gly Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu
 20 25 30
 Ser Asn Ala Thr Cys Ser Ala Arg Thr Cys Pro Pro Asn Gln Phe Ser
 35 40 45
 Cys Ala Ser Gly Arg Cys Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp

50	55	60
Asp Asp Cys Gly Asp Arg Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro		
65	70	75 80

<210> 32
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 32	
Cys Pro Ser Asp Arg Phe Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn	
1 5 10 15	
Arg Trp Leu Cys Asp Gly Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu	
20 25 30	
Ser Asn Ala Thr Cys Ser Ala Arg Thr Cys Pro Pro Asn Gln Phe Ser	
35 40 45	
Cys Ala Ser Gly Arg Cys Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp	
50 55 60	
Asp Asp Cys Gly Asp Arg Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro	
65 70 75 80	
Thr Cys Phe Pro Leu Thr Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile	
85 90 95	
Asn Ile Asn Trp Arg Cys Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser	
100 105 110	
Asp Glu Ala Gly Cys Ser His	
115	

<210> 33
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 33	
Cys Pro Ser Asp Arg Phe Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn	
1 5 10 15	
Arg Trp Leu Cys Asp Gly Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu	
20 25 30	
Ser Asn Ala Thr Cys Ser Ala Arg Thr Cys Pro Pro Asn Gln Phe Ser	
35 40 45	
Cys Ala Ser Gly Arg Cys Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp	
50 55 60	
Asp Asp Cys Gly Asp Arg Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro	
65 70 75 80	
Thr Cys Phe Pro Leu Thr Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile	
85 90 95	
Asn Ile Asn Trp Arg Cys Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser	
100 105 110	
Asp Glu Ala Gly Cys Ser His Ser Cys Ser Ser Thr Gln Phe Lys Cys	
115 120 125	
Asn Ser Gly Arg Cys Ile Pro Glu His Trp Thr Cys Asp Gly Asp Asn	
130 135 140	
Asp Cys Gly Asp Tyr Ser Asp Glu Thr His Ala Asn Cys Thr Asn Gln	
145 150 155 160	
Ala Thr Arg Pro Pro Gly	
165	

<210> 34
 <211> 108

<212> PRT
 <213> Homo sapiens

<400> 34
 Cys Pro Ser Asp Arg Phe Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn
 1 5 10 15
 Arg Trp Leu Cys Asp Gly Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu
 20 25 30
 Ser Asn Ala Thr Cys Ser Ala Arg Thr Cys Pro Pro Asn Gln Phe Ser
 35 40 45
 Cys Ala Ser Gly Arg Cys Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp
 50 55 60
 Asp Asp Cys Gly Asp Arg Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro
 65 70 75 80
 Thr Cys Phe Pro Leu Thr Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile
 85 90 95
 Asn Ile Asn Trp Arg Cys Asp Asn Asp Asn Asp Cys
 100 105

<210> 35
 <211> 289
 <212> PRT
 <213> Homo sapiens

<400> 35
 Cys Pro Ser Asp Arg Phe Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn
 1 5 10 15
 Arg Trp Leu Cys Asp Gly Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu
 20 25 30
 Ser Asn Ala Thr Cys Ser Ala Arg Thr Cys Pro Pro Asn Gln Phe Ser
 35 40 45
 Cys Ala Ser Gly Arg Cys Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp
 50 55 60
 Asp Asp Cys Gly Asp Arg Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro
 65 70 75 80
 Thr Cys Phe Pro Leu Thr Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile
 85 90 95
 Asn Ile Asn Trp Arg Cys Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser
 100 105 110
 Asp Glu Ala Gly Cys Ser His Ser Cys Ser Ser Thr Gln Phe Lys Cys
 115 120 125
 Asn Ser Gly Arg Cys Ile Pro Glu His Trp Thr Cys Asp Gly Asp Asn
 130 135 140
 Asp Cys Gly Asp Tyr Ser Asp Glu Thr His Ala Asn Cys Thr Asn Gln
 145 150 155 160
 Ala Thr Arg Pro Pro Gly Gly Cys His Thr Asp Glu Phe Gln Cys Arg
 165 170 175
 Leu Asp Gly Leu Cys Ile Pro Leu Arg Trp Arg Cys Asp Gly Asp Thr
 180 185 190
 Asp Cys Met Asp Ser Ser Asp Glu Lys Ser Cys Glu Gly Val Thr His
 195 200 205
 Val Cys Asp Pro Ser Val Lys Phe Gly Cys Lys Asp Ser Ala Arg Cys
 210 215 220
 Ile Ser Lys Ala Trp Val Cys Asp Gly Asp Asn Asp Cys Glu Asp Asn
 225 230 235 240
 Ser Asp Glu Glu Asn Cys Glu Ser Leu Ala Cys Arg Pro Pro Ser His
 245 250 255

<400> 36

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<210> 37
<211> 79
<212> PRT
<213> Homo sapiens
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<400> 37

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<210> 38
<211> 126
<212> PRT
<213> Homo sapiens
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<400> 38

37

115	120	125
<210> 39		
<211> 68		
<212> PRT		
<213> Homo sapiens		
<400> 39		
Thr Cys Pro Pro Asn Gln Phe Ser Cys Ala Ser Gly Arg Cys Ile Pro		
1 5 10 15		
Ile Ser Trp Thr Cys Asp Leu Asp Asp Asp Cys Gly Asp Arg Ser Asp		
20 25 30		
Glu Ser Ala Ser Cys Ala Tyr Pro Thr Cys Phe Pro Leu Thr Gln Phe		
35 40 45		
Thr Cys Asn Asn Gly Arg Cys Ile Asn Ile Asn Trp Arg Cys Asp Asn		
50 55 60		
Asp Asn Asp Cys		
65		
<210> 40		
<211> 248		
<212> PRT		
<213> Homo sapiens		
<400> 40		
Cys Pro Pro Asn Gln Phe Ser Cys Ala Ser Gly Arg Cys Ile Pro Ile		
1 5 10 15		
Ser Trp Thr Cys Asp Leu Asp Asp Asp Cys Gly Asp Arg Ser Asp Glu		
20 25 30		
Ser Ala Ser Cys Ala Tyr Pro Thr Cys Phe Pro Leu Thr Gln Phe Thr		
35 40 45		
Cys Asn Asn Gly Arg Cys Ile Asn Ile Asn Trp Arg Cys Asp Asn Asp		
50 55 60		
Asn Asp Cys Gly Asp Asn Ser Asp Glu Ala Gly Cys Ser His Ser Cys		
65 70 75 80		
Ser Ser Thr Gln Phe Lys Cys Asn Ser Gly Arg Cys Ile Pro Glu His		
85 90 95		
Trp Thr Cys Asp Gly Asp Asn Asp Cys Gly Asp Tyr Ser Asp Glu Thr		
100 105 110		
His Ala Asn Cys Thr Asn Gln Ala Thr Arg Pro Pro Gly Cys His		
115 120 125		
Thr Asp Glu Phe Gln Cys Arg Leu Asp Gly Leu Cys Ile Pro Leu Arg		
130 135 140		
Trp Arg Cys Asp Gly Asp Thr Asp Cys Met Asp Ser Ser Asp Glu Lys		
145 150 155 160		
Ser Cys Glu Gly Val Thr His Val Cys Asp Pro Ser Val Lys Phe Gly		
165 170 175		
Cys Lys Asp Ser Ala Arg Cys Ile Ser Lys Ala Trp Val Cys Asp Gly		
180 185 190		
Asp Asn Asp Cys Glu Asp Asn Ser Asp Glu Glu Asn Cys Glu Ser Leu		
195 200 205		
Ala Cys Arg Pro Pro Ser His Pro Cys Ala Asn Asn Thr Ser Val Cys		
210 215 220		
Leu Pro Pro Asp Lys Leu Cys Asp Gly Asn Asp Asp Cys Gly Asp Gly		
225 230 235 240		
Ser Asp Glu Gly Glu Leu Cys Asp		
245		

<210> 41
 <211> 39
 <212> PRT
 <213> Homo sapiens

<400> 41
 Thr Cys Phe Pro Leu Thr Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile
 1 5 10 15
 Asn Ile Asn Trp Arg Cys Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser
 20 25 30
 Asp Glu Ala Gly Cys Ser His
 35

<210> 42
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 42
 Thr Cys Phe Pro Leu Thr Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile
 1 5 10 15
 Asn Ile Asn Trp Arg Cys Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser
 20 25 30
 Asp Glu Ala Gly Cys Ser His Ser Cys Ser Ser Thr Gln Phe Lys Cys
 35 40 45
 Asn Ser Gly Arg Cys Ile Pro Glu His Trp Thr Cys Asp Gly Asp Asn
 50 55 60
 Asp Cys Gly Asp Tyr Ser Asp Glu Thr His Ala Asn Cys Thr Asn Gln
 65 70 75 80
 Ala Thr Arg Pro Pro Gly
 85

<210> 43
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 43
 Thr Cys Phe Pro Leu Thr Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile
 1 5 10 15
 Asn Ile Asn Trp Arg Cys Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser
 20 25 30
 Asp Glu Ala Gly Cys Ser His Ser Cys Ser Ser Thr Gln Phe Lys Cys
 35 40 45
 Asn Ser Gly Arg Cys Ile Pro Glu His Trp Thr Cys Asp Gly Asp Asn
 50 55 60
 Asp Cys Gly Asp Tyr Ser Asp Glu Thr His Ala Asn Cys Thr Asn Gln
 65 70 75 80
 Ala Thr Arg Pro Pro Gly Gly Cys His Thr Asp Glu Phe Gln Cys Arg
 85 90 95
 Leu Asp Gly Leu Cys Ile Pro Leu Arg Trp Arg Cys Asp Gly Asp Thr
 100 105 110
 Asp Cys Met Asp Ser Ser Asp Glu Lys Ser Cys Glu Gly Val Thr His
 115 120 125
 Val Cys Asp Pro Ser Val Lys Phe Gly Cys Lys Asp Ser Ala Arg Cys
 130 135 140
 Ile Ser Lys Ala Trp Val Cys Asp Gly Asp Asn Asp Cys Glu Asp Asn
 145 150 155 160

Ser Asp Glu Glu Asn Cys Glu Ser Leu
165

<210> 44
<211> 209
<212> PRT
<213> Homo sapiens

<400> 44
Thr Cys Phe Pro Leu Thr Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile
1 5 10 15
Asn Ile Asn Trp Arg Cys Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser
20 25 30
Asp Glu Ala Gly Cys Ser His Ser Cys Ser Ser Thr Gln Phe Lys Cys
35 40 45
Asn Ser Gly Arg Cys Ile Pro Glu His Trp Thr Cys Asp Gly Asp Asn
50 55 60
Asp Cys Gly Asp Tyr Ser Asp Glu Thr His Ala Asn Cys Thr Asn Gln
65 70 75 80
Ala Thr Arg Pro Pro Gly Gly Cys His Thr Asp Glu Phe Gln Cys Arg
85 90 95
Leu Asp Gly Leu Cys Ile Pro Leu Arg Trp Arg Cys Asp Gly Asp Thr
100 105 110
Asp Cys Met Asp Ser Ser Asp Glu Lys Ser Cys Glu Gly Val Thr His
115 120 125
Val Cys Asp Pro Ser Val Lys Phe Gly Cys Lys Asp Ser Ala Arg Cys
130 135 140
Ile Ser Lys Ala Trp Val Cys Asp Gly Asp Asn Asp Cys Glu Asp Asn
145 150 155 160
Ser Asp Glu Glu Asn Cys Glu Ser Leu Ala Cys Arg Pro Pro Ser His
165 170 175
Pro Cys Ala Asn Asn Thr Ser Val Cys Leu Pro Pro Asp Lys Leu Cys
180 185 190
Asp Gly Asn Asp Asp Cys Gly Asp Gly Ser Asp Glu Gly Glu Leu Cys
195 200 205
Asp

<210> 45
<211> 47
<212> PRT
<213> Homo sapiens

<400> 45
Ser Cys Ser Ser Thr Gln Phe Lys Cys Asn Ser Gly Arg Cys Ile Pro
1 5 10 15
Glu His Trp Thr Cys Asp Gly Asp Asn Asp Cys Gly Asp Tyr Ser Asp
20 25 30
Glu Thr His Ala Asn Cys Thr Asn Gln Ala Thr Arg Pro Pro Gly
35 40 45

<210> 46
<211> 89
<212> PRT
<213> Homo sapiens

<400> 46
Ser Cys Ser Ser Thr Gln Phe Lys Cys Asn Ser Gly Arg Cys Ile Pro

1 5 10 15
 Glu His Trp Thr Cys Asp Gly Asp Asn Asp Cys Gly Asp Tyr Ser Asp
 20 25 30
 Glu Thr His Ala Asn Cys Thr Asn Gln Ala Thr Arg Pro Gly Gly
 35 40 45
 Cys His Thr Asp Glu Phe Gln Cys Arg Leu Asp Gly Leu Cys Ile Pro
 50 55 60
 Leu Arg Trp Arg Cys Asp Gly Asp Thr Asp Cys Met Asp Ser Ser Asp
 65 70 75 80
 Glu Lys Ser Cys Glu Gly Val Thr His
 85

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 <212> PRT
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<400> 47
 Ser Cys Ser Ser Thr Gln Phe Lys Cys Asn Ser Gly Arg Cys Ile Pro
 1 5 10 15
 Glu His Trp Thr Cys Asp Gly Asp Asn Asp Cys Gly Asp Tyr Ser Asp
 20 25 30
 Glu Thr His Ala Asn Cys Thr Asn Gln Ala Thr Arg Pro Pro Gly Gly
 35 40 45
 Cys His Thr Asp Glu Phe Gln Cys Arg Leu Asp Gly Leu Cys Ile Pro
 50 55 60
 Leu Arg Trp Arg Cys Asp Gly Asp Thr Asp Cys Met Asp Ser Ser Asp
 65 70 75 80
 Glu Lys Ser Cys Glu Gly Val Thr His Val Cys Asp Pro Ser Val Lys
 85 90 95
 Phe Gly Cys Lys Asp Ser Ala Arg Cys Ile Ser Lys Ala Trp Val Cys
 100 105 110
 Asp Gly Asp Asn Asp Cys Glu Asp Asn Ser Asp Glu Glu Asn Cys Glu
 115 120 125
 Ser Leu Ala Cys Arg Pro Pro Ser His Pro Cys Ala Asn Asn Thr Ser
 130 135 140
 Val Cys Leu Pro Pro Asp Lys Leu Cys Asp Gly Asn Asp Asp Cys Gly
 145 150 155 160
 Asp Gly Ser Asp Glu Gly Glu Leu Cys Asp
 165 170

<210> 48
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 48
 Gly Cys His Thr Asp Glu Phe Gln Cys Arg Leu Asp Gly Leu Cys Ile
 1 5 10 15
 Pro Leu Arg Trp Arg Cys Asp Gly Asp Thr Asp Cys Met Asp Ser Ser
 20 25 30
 Asp Glu Lys Ser Cys Glu Gly Val Thr His
 35 40

<210> 49
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 49
 Gly Cys His Thr Asp Glu Phe Gln Cys Arg Leu Asp Gly Leu Cys Ile
 1 5 10 15
 Pro Leu Arg Trp Arg Cys Asp Gly Asp Thr Asp Cys Met Asp Ser Ser
 20 25 30
 Asp Glu Lys Ser Cys Glu Gly Val Thr His Val Cys Asp Pro Ser Val
 35 40 45
 Lys Phe Gly Cys Lys Asp Ser Ala Arg Cys Ile Ser Lys Ala Trp Val
 50 55 60
 Cys Asp Gly Asp Asn Asp Cys Glu Asp Asn Ser Asp Glu Glu Asn Cys
 65 70 75 80
 Glu Ser Leu

<210> 50
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 <212> PRT
 <213> Homo sapiens

<400> 50
 Gly Cys His Thr Asp Glu Phe Gln Cys Arg Leu Asp Gly Leu Cys Ile
 1 5 10 15
 Pro Leu Arg Trp Arg Cys Asp Gly Asp Thr Asp Cys Met Asp Ser Ser
 20 25 30
 Asp Glu Lys Ser Cys Glu Gly Val Thr His Val Cys Asp Pro Ser Val
 35 40 45
 Lys Phe Gly Cys Lys Asp Ser Ala Arg Cys Ile Ser Lys Ala Trp Val
 50 55 60
 Cys Asp Gly Asp Asn Asp Cys Glu Asp Asn Ser Asp Glu Glu Asn Cys
 65 70 75 80
 Glu Ser Leu Ala Cys Arg Pro Pro Ser His Pro Cys Ala Asn Asn Thr
 85 90 95
 Ser Val Cys Leu Pro Pro Asp Lys Leu Cys Asp Gly Asn Asp Asp Cys
 100 105 110
 Gly Asp Gly Ser Asp Glu Gly Glu Leu Cys Asp
 115 120

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 <211> 41
 <212> PRT
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<400> 51
 Val Cys Asp Pro Ser Val Lys Phe Gly Cys Lys Asp Ser Ala Arg Cys
 1 5 10 15
 Ile Ser Lys Ala Trp Val Cys Asp Gly Asp Asn Asp Cys Glu Asp Asn
 20 25 30
 Ser Asp Glu Glu Asn Cys Glu Ser Leu
 35 40

<210> 52
 <211> 81
 <212> PRT
 <213> Homo sapiens

<400> 52
 Val Cys Asp Pro Ser Val Lys Phe Gly Cys Lys Asp Ser Ala Arg Cys
 1 5 10 15

Ile Ser Lys Ala Trp Val Cys Asp Gly Asp Asn Asp Cys Glu Asp Asn
 20 25 30
 Ser Asp Glu Asn Cys Glu Ser Leu Ala Cys Arg Pro Pro Ser His
 35 40 45
 Pro Cys Ala Asn Asn Thr Ser Val Cys Leu Pro Pro Asp Lys Leu Cys
 50 55 60
 Asp Gly Asn Asp Asp Cys Gly Asp Gly Ser Asp Glu Gly Glu Leu Cys
 65 70 75 80
 Asp

<210> 53
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 <212> PRT
 <213> Homo sapiens

<400> 53
 Ala Cys Arg Pro Pro Ser His Pro Cys Ala Asn Asn Thr Ser Val Cys
 1 5 10 15
 Leu Pro Pro Asp Lys Leu Cys Asp Gly Asn Asp Asp Cys Gly Asp Gly
 20 25 30
 Ser Asp Glu Gly Glu Leu Cys Asp
 35 40

<210> 54
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 <212> PRT
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<400> 54
 Ser Gly Phe Ser Leu Gly Ser Asp Gly Lys
 1 5 10

<210> 55
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 <212> PRT
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<400> 55
 Gly Ile Ala Leu Asp Pro Ala Met Gly Lys
 1 5 10

<210> 56
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 56
 Gly Gly Ala Leu His Ile Tyr His Gln Arg
 1 5 10

<210> 57
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 <212> PRT
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<400> 57

Val Phe Phe Thr Asp Tyr Gly Gln Ile Pro Lys
1 5 10

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